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SUGHRUE MION PLLC
USPTO CUSTOMER NO WITH IBM/SVL
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037

| EXAMINER | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/078,419 | LAL, AMRISH K. | |
| | Examiner | Art Unit | |
| | AJAY BHATIA | 2445 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *27 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *4-9,15-21 and 31-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-9,15-21 and 31-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

### *Response to Arguments*

Applicant's arguments with respect to claims 1/27/2009 have been considered but are moot in view of the new ground(s) of rejection. Applicant has amended the claim, and the limitations of the claims are now taught by the combination of Smith and Logan

### *Claim Rejections - 35 USC § 112*

Claims 40 and 47 recites the limitation "tangibly embodied computer readable medium of instructions" in first line. There is insufficient antecedent basis for this limitation in the claim. The specification fails to define a “"tangibly embodied computer readable medium of instructions."

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 40 and 47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicant is attempting to computer program per se,'" tangibly embodied computer readable medium of instructions." A medium composed of instructions is software and not an article of manufacture.

Claims 35 and 36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicant claims a system with no hardware, the link checking/correction service unit are software programs run on a server.

Claims 39 and 46 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicant makes use of 112 6th means plus function terminology, but the means defined in the specification are software means.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-9, 15-21 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (United States Patent 6,578,078) in view of Logan et al. (United States Patent 5,761,683).

For claim 4, Smith teaches, a method of correcting links in a document stored on a local server, comprising:

sending a first request from the local server to a link checking service unit of a remote server to determine whether a first resource in the remote server corresponding

to a first link in the document is located at said first link; (Smith, Col. 15 lines 16-39, RPE)

receiving a first response to said first request from the remote server, the first response containing an indication that the first resource is not located at the first link, (Smith, Col. 18 lines 49-62, broken link, local and external RPE server, communicate, abstract “website by communicating with an RPE running on each”)

wherein the remote server generates the indication, stored on the remote server to determine that the first resource is not located at the first link, (Smith, Col. 18 lines 49-62, broken link, local and external RPE server, communicate, abstract “website by communicating with an RPE running on each”)

automatically changing the document in response to the receiving of the first response, based on the indication, wherein said changing of the document comprises automatically replacing the first link or automatically deleting the first link; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and automatically sending a second request from the local server to the link checking service unit of the remote server to determine whether a second resource in the remote server corresponding to a second link in the document is located at the second link after the changing of the document(Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, by referring to a mapping table stored, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources;

Logan teaches, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 5, Smith-Ref(2) teaches, the method of claim 4, wherein the response further includes a link status code indicating a status of the first resource. (Smith, Col. 18 lines 49-62, meta-data)

For claim 6, Smith-Ref(2) teaches, the method of claim 4, wherein the document is a World-Wide Web page and the first link is a hypertext link. (Smith, Col. 18 lines 49-62, URL)

For claim 7, Smith-Ref(2) teaches, the method of claim 4, wherein the first link includes a first uniform resource locator (URL) and the indication includes a second URL, wherein the document is changed by changing the first URL in the first link to the second URL. (Smith, Col. 18 lines 49-62, URL)

For claim 8, Smith-Ref(2) teaches, the method of claim 4, wherein the document is changed by automatically deleting the first link in the document if the first response does not include a replacement link and contains a link status code indicating that the first link is invalid. (Smith, Col. 14 lines 9-17, URL marked)

For claim 9, Smith-Ref(2) teaches, the method of claim 4, wherein said sending the first request, receiving the first response, and changing the document are performed in a web server. (Smith, Col. 17 line 51 to Col. 18 line 17)

For claim 15, Smith teaches, a method for determining a status of links in a document stored on a local server, comprising:

receiving a first request from the local server to determine whether a first resource of a remote server is located at a first link in the document, wherein the first link includes a first location indicator of the first resource; (Smith, Col. 18 lines 49-62, broken link, local and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

detecting, by the remote server, if the first resource is present within a storage unit at a location indicated by the first location indicator (Smith, Col. 15 lines 16-39, RPE)

determining, by the remote server, if the first resource is present at an alternate location if the first resource is not detected in the location indicated by the first location indicator; (Smith, Col. 18 lines 49-62, broken link, local and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

in response to the first request, returning, by the remote server, an alternate location identifier indicating the alternate location of the first resource if the first resource is determined to be present at the alternate location, wherein the document is automatically changed in response to the returning of the alternate location identifier by automatically replacing the first link with another link comprising the alternate location identifier; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and receiving a second request which is automatically sent from the local server after the document is automatically changed, to determine whether a second resource

of the remote server is located at a second link in the document, wherein the second link includes a location indicator of the second resource. (Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, by referring to the mapping table by referring to a snapping table stored on the remote server, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources;

Logan teaches, by referring to the mapping table by referring to a snapping table stored on the remote server, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources;
(Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 16, Smith-Ref(2) teaches, the method of claim 15, wherein the first link is a hypertext link and the location indicator of the resource is a uniform resource locator (URL). (Smith, Col. 18 lines 49-62, URL)

For claim 17, Smith-Ref(2) teaches, the method of claim 16, wherein the first resource is a web page. (Smith, Col. 18 lines 49-62, URL)

For claim 18, Smith-Ref(2) teaches, the method of claim 16, further comprising returning a link status code indicating whether the first resource is present in the storage unit. (Smith, Col. 14 lines 8-17, delete or move)

For claim 19, Smith-Ref(2) teaches, the method of claim 18, wherein the link status code indicates whether the first resource has been deleted from the storage unit. (Smith, Col. 14 lines 9-17, delete or move)

For claim 20, Smith-Ref(2) teaches, the method of claim 15, wherein said determining if the first resource is present at an alternate location is performed by consulting a

mapping table associating a first location indicator with a second location indicator, wherein the first location indicator indicates a prior location of the first resource and the second location indicator indicates a present location of the first resource. (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13) and (Smith, Col. 15 line 62 to Col. 16 Col. 5, database, Col. 17 line 51 to Col. 18 line 17)The same motivation that was utilized in the rejection of claim 15, applies equally as well to claim 20.

For claim 21, Smith-Ref(2) teaches, the method of claim 20, wherein the first and second location indicators are uniform resource locators (URLs). (Smith, Col. 18 lines 49-62, URL)

For claim 31, Smith-Ref(2) teaches, the method of claim 4, wherein the link checking service unit is disposed in a first web server, and the first request is sent from a second web server different from the first web server. (Smith, Col. 18 lines 18-62, RPE, external webserver)

For claim 32, Smith-Ref(2) teaches, the method of claim 15, wherein the first request is received by a first web server, and the alternate location identifier is returned to a second web server different from the first web server. (Smith, Col. 18 lines 49-62, metadata)

For claim 33, Smith-Ref(2) teaches, the method of claim 4, wherein the automatic changing of the document is performed before a status of any other link in the document is checked. (Smith, Col. 18 lines 49-62, broken hyperlink are update, repeat, figure5)

For claim 34, Smith-Ref(2) teaches, the method of claim 15, wherein the automatic changing of the document is performed before a status of any other link in the document is checked. (Smith, Col. 18 lines 49-62, broken hyperlink are update, repeat, figure5)

For claim 35, Smith teaches, a system for correcting links to resources in a network, comprising:

a link checking service unit of a remote web server; (Smith, Col. 18 lines 49-62, broken link, local and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

and a link correction service unit of a local web server, (Smith, Col. 18 lines 49-62, broken link, local and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

wherein said link correction service unit sends a first request from the local server to the link checking service unit to determine whether a first resource in the remote server corresponding to a first link in a document stored on the local server is located at said first link, (Smith, Col. 15 lines 16-39, RPE)

wherein the link checking service unit of the remote server sends a first response to said first request to the link correction service unit, the first response containing an

indication that the first resource is not located at the first link, wherein the link checking service unit of the remote server generates the stored on the remote server to determine that the first resource is not located at the first link, (Smith, Col. 18 lines 49-62, broken link, locale and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

wherein the link correction service unit automatically changes the document in response to the receiving of the first response, based on the indication, wherein said changing of the document comprises automatically replacing the first link or automatically deleting the first link; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and wherein the link correction service unit automatically sends a second request from the local server to the link checking service unit of the remote server to determine whether a second resource in the remote server corresponding to a second link in the document is located at the second link after the changing of the document. (Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, indication by referring to a mapping table wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources,

Logan teaches, indication by referring to a mapping table wherein said mapping table stores changes that occur in locations of resources on the remote server, said first

resource being among said resources, (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 36, Smith - Logan teaches, the system of claim 35, wherein said document is a World-Wide Web page, and said link is a hypertext link. (Smith, Col. 18 lines 49-62, URL)

For claim 37, Smith teaches, an apparatus for correcting a link in a document, comprising:

a document repository having stored therein one or more documents; (Smith, Col. 11 lines 14-35, web server)

a corrected document repository having stored therein one or more corrected documents; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and a link correction service unit connected to the document repository and the corrected document repository, and configured to correct link in a document among the one or more documents in the document repository, wherein the link correction service unit: (Smith, Col. 15 lines 16-39, RPE)

sends a first request from a local server on which the link correction service is disposed to a link checking service unit of a remote server to determine whether a first resource in the remote server corresponding to a first link in the document is located at said first link; (Smith, Col. 15 lines 16-39, RPE)

receives a first response to said first request from the remote server, the first response containing an indication that the first resource is not located at the first link, wherein the remote server generates the indication stored on the remote server to determine that the first resource is not located at the first link, (Smith, Col. 18 lines 49-62, broken link, locale and external RPE server, communicate, abstract “website by communicating with an RPE running on each”)

automatically changes the document in response to the receiving of the first response, based on the indication, wherein said changing of the document comprises automatically replacing the first link or automatically deleting the first link; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

automatically sends a second request from the local server to the link checking service unit of the remote server to determine whether a second resource in the remote

server corresponding to a second link in the document is located at the second link after the changing of the document; (Smith, Col. 18 lines 48-62, repeat)

and stores a corrected document having the replaced first link in the corrected document repository. (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

Smith fails to clearly disclose, by referring to a mapping table, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources;

Logan teaches, by referring to a mapping table, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides

the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 38, Smith - Logan teaches, the apparatus of claim 37, wherein the link is a hypertext link containing a uniform resource locator (URL) and the document is a web page. (Smith, Col. 18 lines 49-62, URL)

For claim 39, Smith teaches, an apparatus for correcting a link in a document stored on a local sever, comprising:

means for sending a first request from the local server to a link checking service unit of a remote server to determine whether a first resource in the remote server corresponding to a first link in the document is located at said first link; (Smith, Col. 15 lines 16-39, RPE)

means for receiving a first response to said first request from the remote server, the first response containing an indication that the first resource is not located at the first link, wherein the remote server generates the indication stored on the remote server to determine that the first resource is not located at the first link, (Smith, Col. 18 lines 49-62, broken link, locale and external RPE server, communicate, abstract “website by communicating with an RPE running on each”)

means for automatically changing the document in response to the receiving of the first response, based on the indication, wherein said changing of the document

comprises automatically replacing the first link or automatically deleting the first link; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and means for automatically sending a second request from the local server to the link checking service unit of the remote server to determine whether a second resource in the remote server corresponding to a second link in the document is located at the second link after the changing of the document. (Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, by referring to a mapping table, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources;

Logan teaches, by referring to a mapping table, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 40, Smith teaches, a tangibly embodied computer readable medium of instructions suitable for execution by a computer, comprising:

program instructions for sending a first request from a local server on which a document is stored to a link checking service unit of a remote server to determine whether a first resource in the remote server corresponding to a first link in the document is located at said first link; (Smith, Col. 15 lines 16-39, RPE)

program instructions for receiving a first response to said first request from the remote server, the first response containing an indication that the first resource is not located at the first link, wherein the remote server generates the indication stored on the remote server to determine that the first resource is not located at the first link, (Smith, Col. 18 lines 49-62, broken link, locale and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

program instructions for automatically changing the document in response to the receiving of the first response, based on the indication, wherein said changing of the document comprises automatically replacing the first link or automatically deleting the first link; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and program instructions for automatically sending a second request from the local server to the link checking service unit of the remote server to determine whether a second resource in the remote server corresponding to a second link in the document is located at the second link after the changing of the document. (Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, by referring to a mapping table, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources;

Logan teaches, by referring to a mapping table, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides

the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 41, Smith teaches, an apparatus for correcting a link in a document stored on a local server, comprising:

a document repository having stored therein one or more documents on a remote server; (Smith, Col. 11 lines 14-35, web server)

and a link checking service unit connected to the document repository configured to:

receive a first request from the local server to determine whether the first resource is located at a first link in the document, wherein the first link includes the first prior resource-locator of the first resource; (Smith, )

detect if the first resource is present within the document repository at a location indicated by the first prior resource-locator (Smith, Col. 18 lines 49-62, broken link, locale and external RPE server, communicate, abstract “website by communicating with an RPE running on each”)

in response to the first request, return the first present resource-locator indicating the alternate location of the first resource if the first resource is determined to be present at the alternate location, wherein the document is automatically changed in response to the returning of the alternate location identifier by automatically replacing the first link with another link comprising the first present resource-locator; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and receive a second request which is automatically sent from the local server after the document is automatically changed, to determine whether a second resource of the remote server is located at a second link in the document, wherein the second link includes a location indicator of the second resource. (Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, by referring to the mapping table unit; , determine if the first resource is present at an alternate location if the first resource is not detected in the location indicated by the first prior resource-locator by referring to the mapping table unit; a mapping table unit having stored therein mapping table information associating a first prior resource-locator with a first present resource-locator, the first prior resource-locator indicating a prior location of a first resource within the document repository and the first present resource-locator indicating a present location of the first resource;

Logan teaches, by referring to the mapping table unit; , determine if the first resource is present at an alternate location if the first resource is not detected in the location indicated by the first prior resource-locator by referring to the mapping table unit; a mapping table unit having stored therein mapping table information associating a first prior resource-locator with a first present resource-locator, the first prior resource-locator indicating a prior location of a first resource within the document repository and the first present resource-locator indicating a present location of the first resource;

(Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 42, Smith - Logan teaches, the apparatus of claim 41, wherein the first prior and first present resource-locators are uniform resource locators (URLs). (Smith, Col. 18 lines 49-62, URL)

For claim 43, Smith - Logan teaches, the apparatus of claim 41, wherein the mapping table further includes a second prior resource-locator indicating a location of the second resource and a status code indicating a status of the second prior resource-locator. (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13) and (Smith, Col. 15 line 62 to Col. 16 Col. 5, database)The

same motivation that was utilized in the rejection of claim 41, applies equally as well to claim 43.

For claim 44, Smith - Logan teaches, the apparatus of claim 43, wherein the status code indicates that the second resource corresponding to the second prior resource-locator has been deleted. (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13) and (Smith, Col. 15 line 62 to Col. 16 Col. 5, database) The same motivation that was utilized in the rejection of claim 41, applies equally as well to claim 44.

For claim 45, Smith- Logan teaches, the apparatus of claim 43, wherein the status code indicates that the second prior resource-locator indicates a present location of the second resource in the document repository. (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13) and (Smith, Col. 15 line 62 to Col. 16 Col. 5, database) The same motivation that was utilized in the rejection of claim 41, applies equally as well to claim 45.

For claim 46, Smith teaches, an apparatus for determining a status of a link in a document stored on a local server, comprising:

means for receiving a first request from the local server to determine whether a first resource of a remote server is located at a first link in the document, wherein the first link includes a first location indicator of the first resource; (Smith, )

means for detecting, by the remote server, if the first resource is present within a storage unit at a location indicated by the first location indicator (Smith, Col. 18 lines 49-62, broken link, locale and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

means for returning, by the remote server, in response to the first request, an alternate location identifier indicating the alternate location of the first resource if the first resource is determined to be present at the alternate location, wherein the document is automatically changed in response to the returning of the alternate location identifier by automatically replacing the first link with another link comprising the alternate location identifier; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and means for receiving a second request which is automatically sent from the local server after the document is automatically changed, to determine whether a second resource of the remote server is located at a second link in the document, wherein the second link includes a location indicator of the second resource. (Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, by referring to a mapping table stored on the remote server, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; means for determining, by the remote server, if the first resource is present at an alternate location if the first resource is not detected in the location indicated by the first location indicator by referring to the mapping table;

Logan teaches, by referring to a mapping table stored on the remote server, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; means for determining, by the remote server, if the first resource is present at an alternate location if the first resource is not detected in the location indicated by the first location indicator by referring to the mapping table; (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

Smith and Logan are compatible, because RPE allows for communication to a other RPE, (Smith, Col. 15 line 62 to Col. 16 Col. 5)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine Smith with that of Logan, because Logan provides the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

For claim 47, Smith teaches, a tangibly embodied computer readable medium of instructions suitable for execution on a computer for determining a status of a link in a document stored on a local server, comprising:

program instructions for receiving a first request from the local server to determine whether a first resource of a remote server is located at a first link in the document, wherein the first link includes a first location indicator of the first resource; (Smith, Col. 15 lines 16-39, RPE)

program instructions for detecting, by the remote server, if the first resource is present within a storage unit at a location indicated by the first location indicator (Smith, Col. 18 lines 49-62, broken link, locale and external RPE server, communicate, abstract "website by communicating with an RPE running on each")

program instructions for returning, by the remote server, in response to the first request, an alternate location identifier indicating the alternate location of the first resource if the first resource is determined to be present at the alternate location, wherein the document is automatically changed in response to the returning of the alternate location identifier by automatically replacing the first link with another link comprising the alternate location identifier; (Smith, Col. 17 line 51 to Col. 18 line 17, rename)

and program instructions for receiving a second request which is automatically sent from the local server after the document is automatically changed, to determine whether a second resource of the remote server is located at a second link in the document, wherein the second link includes a location indicator of the second resource. (Smith, Col. 18 lines 48-62, repeat)

Smith fails to clearly disclose, by referring to a mapping table stored on the remote server, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; program instructions for determining, by the remote server, if the first resource is present at an alternate location if the first resource is not detected in the location indicated by the first location indicator by referring to the mapping table;

Logan teaches, by referring to a mapping table stored on the remote server, wherein said mapping table stores changes that occur in locations of resources on the remote server, said first resource being among said resources; program instructions for determining, by the remote server, if the first resource is present at an alternate location if the first resource is not detected in the location indicated by the first location indicator by referring to the mapping table; (Logan, Col. 20 lines 23-65, lookup table, URL with specific remote URL, test, if-modified-since, figure13)

Smith and Logan are both in the field of hypertext (Logan, Col. 1 lines 60-65)

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the added advantage by allowing a decrease in the amount of time. (Logan, Col. 2 lines 53, -65, time reward)

## *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Notice of references cited (if appropriate).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJAY BHATIA whose telephone number is (571)272-3906. The examiner can normally be reached on M, T, H, F 9:00-3:30, Also please fax interview requests to 571-273-3906.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ajay Bhatia/

Examiner, Art Unit 2445